## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



February February

UNITED STATES DEPARTMENT OF AGRICULTURE Bureau of Agricultural Economics

STATUS OF THE DAIRY INDUSTRY TODAY

FACTORS IN THE DAIRY OUTLOOK

(Charts)

Ву

E. E. Vial
Division of Statistical and
Historical Research

Presented at

The Middle States Conference on Milk Control
Trenton, New Jersey
December 9-10, 1935

JUN 2 0 1946

### \*ADJUSTED VALUE PER HEAD OF MILK COWS AND CATTLE OTHER THAN MILK COWS, 1875-1935

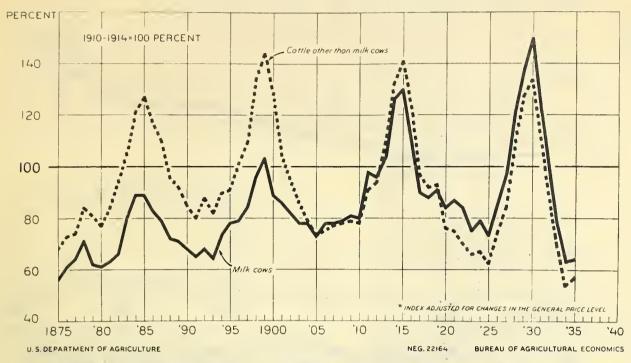


Figure 1.- There are marked cyclee in the prices of milk cowe and other cattle. The cyclee are 14 to 16 years long. When cattle prices are high in relation to other prices cattle production is etimulated, and when cattle prices are low in relation to other prices cattle production is curtailed. The 1934 drought caused a marked reduction in cattle numbers and prices in 1935 increased more rapidly than in other periods of low prices. In September 1935 the index number for milk cowe was about 90.

#### NUMBER OF ALL CATTLE ON FARMS, JAN. 1, 1890 TO DATE

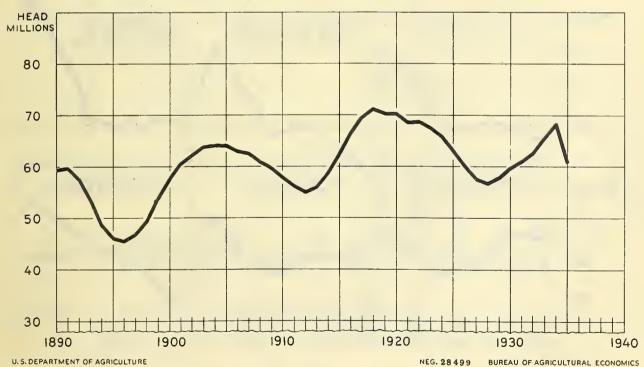


Figure 2.- There is a marked cycle in the number of all cattle on farms. Prices of cattle are high when numbers are low and prices low when numbers are high. The last low point in numbers was in 1928, and numbers increased 20 percent in the 6 years from 1928 to 1934. In 1934 numbers declined 11 percent. This was the most drastic decline in one year on record.

#### NUMBER OF MILK COWS ON FARMS, JAN. 1, 1890 TO DATE

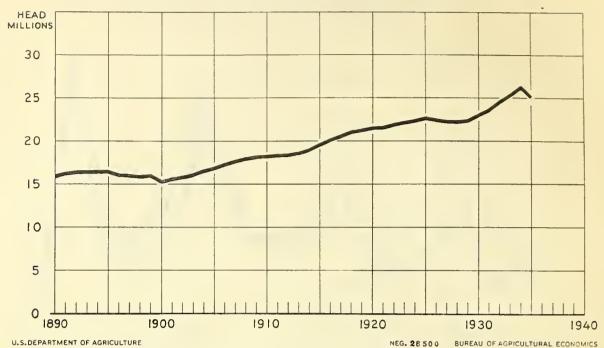


Figure 3.- There has been a general upward trand in the number of milk cows on farms. When cattle prices have been high the rate of increase in milk cowe has been relatively rapid. From 1928 to 1934 the number of milk cows increased 18 percent. With the liquidation in cattle numbers in 1934 the number of milk cows declined by 1,085,000. Preliminary estimates indicate a further decline of about 600,000 head in 1935.

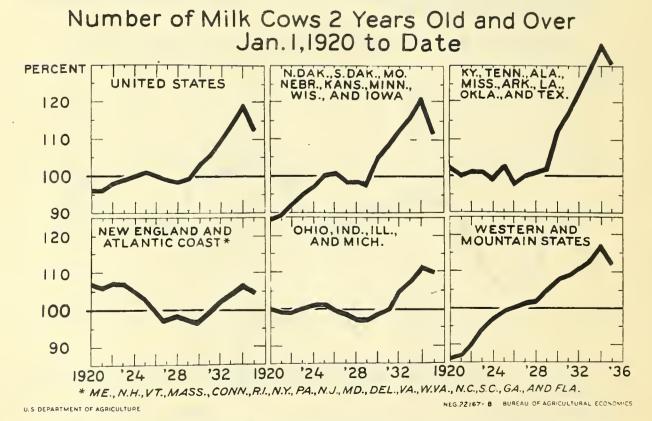


Figure 4.- From 1928 to 1934 the number of milk cowe increased 18 percent. There were increases in numbers in all sections but the smallest increase, 9 percent, was in the North Atlantic States and the largest, 27 percent, in the South Central States. There was also a large increase in the West North Central States. In 1934 the reduction in numbers was greatest in the West North Central States where the drought was most serious.

## Cows, Heifers, and Calves Being Kept for Milk Cows, U.S., Jan. 1, 1920 to Date

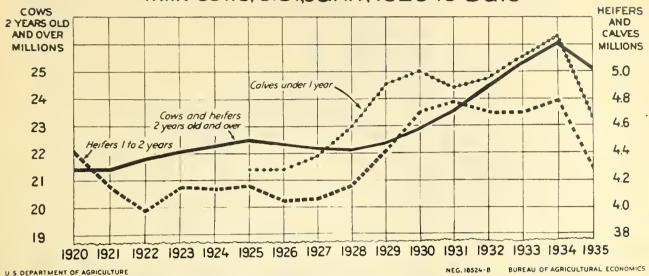
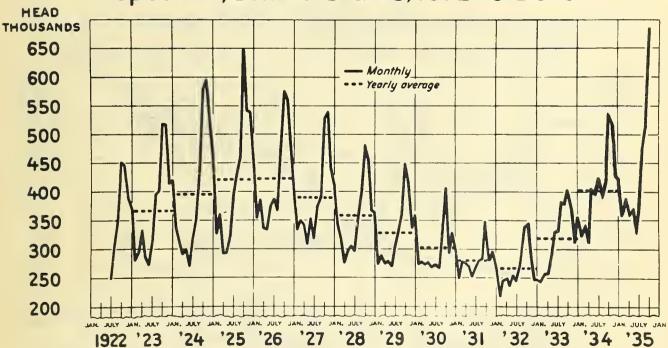


Figure 5.- The number of dairy heifers increased earlier and more rapidly than the number of milk cows from 1926 to 1934. In 1934 the number of milk cowe decreased 4 percent, the number of dairy heifere 1 to 2 years old decreased 10 percent, and the number of heifer calvee 12 percent. The percentage decline in the number of heifers was greater than the decline in cow numbers and the ratio of heifere to cowe was low.

# Cows and Heifers Slaughtered Under Federal Inspection, United States, 1922 to Date



U.S. DEPARTMENT OF AGRICULTURE

HEG. 22180-88UREAU OF ACRICULTURAL ECONOMICS

Figure 6.- The inspected slaughter of cows and heifers decreased from 1.925 to 1932. Since 1932 slaughter has increased. In 1934 elaughter, exclusive of government purchases, was the highest since 1926. Cow slaughter during 1935 has been heavy.

MILK PER COW

#### MILK PRODUCTION PER COW AND TOTAL MILK PRODUCTION IN THE UNITED STATES, 1924 TO DATE

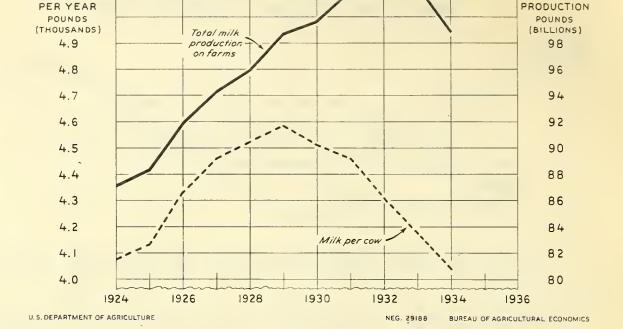
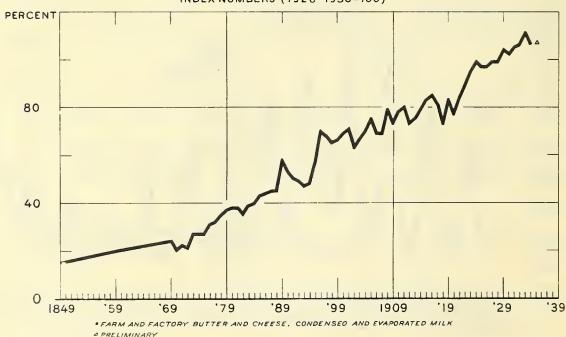


Figure 7.- During the 10-year period 1924 to 1933 there was an upward trend in total milk production which was slightly greater than the upward trend in population. In 1934 production per capita was about 5 percent below the peak in 1931. Milk production per cow increased from 1924 to 1929, but decreased from 1929 to 1934. The poor pastures from 1930 to 1934 tended to curtail production per cow and the decline in prices paid to farmers for milk and butterfat discouraged intensive feeding.

### PRODUCTION OF MANUFACTURED DAIRY PRODUCTS\*, MILK EQUIVALENT BASIS, UNITED STATES, 1849 TO DATE

INDEX NUMBERS (1926-1930=100)



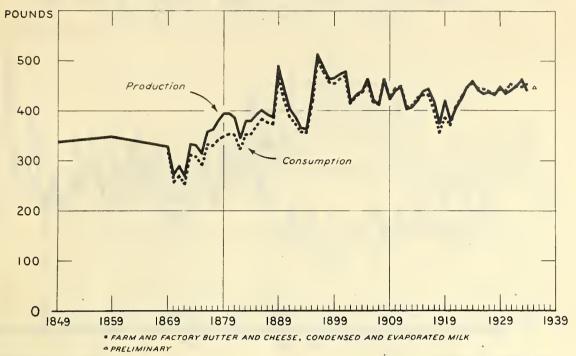
U.S. DEPARTMENT OF AGRICULTURE

NEG. 29291 BUREAU OF AGRICULTURAL ECONOMICS

TOTAL MILK

Figure 8.- There has been a marked upward trend in the production of manufactured dairy products. Production was relatively low in the World War period and in the drought period of the 90's.

#### PER CAPITA PRODUCTION AND CONSUMPTION OF MANUFACTURED DAIRY PRODUCTS\*, MILK EQUIVALENT BASIS, UNITED STATES; 1849 TO DATE



U.S. DEPARTMENT OF AGRICULTURE

NEG. 29293 BUREAU OF AGRICULTURAL ECONOMICS

Figure 9.- From 1869 to 1896 per capita production of manufactured dairy products increased. During the period 1896 to 1914 per capita production declined, and during the war period was the lowest in over 20 years. During the 11-year period 1924 to 1934 per capita production was relatively etable at elightly above the pre-war level. During the 70's and 80's there was a considerable volume of cheese and butter exported and per capita consumption was less than per capita production. Production and consumption fluctuate together and during the last 35 years there has been little difference between them.

# Price of Butter and Consumption Per Capita of Oleomargarine July I, 1891 – June 30, 1935

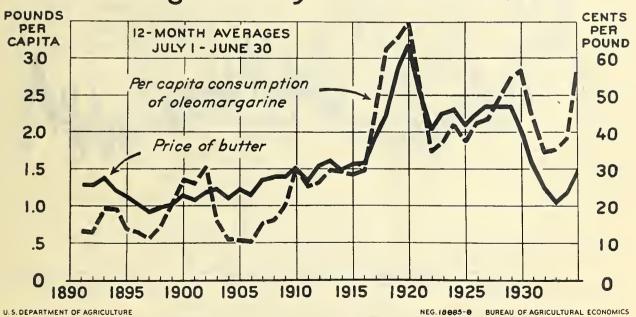


Figure 10.- Consumption of oleomargarine per capita fluctuates with the price of butter, oleomargarine consumption being high when butter ie high in price.

#### POUNDS OF FEED GRAIN ONE POUND OF BUTTERFAT WILL BUY (BASED ON FARM PRICES) U.S. AVERAGE

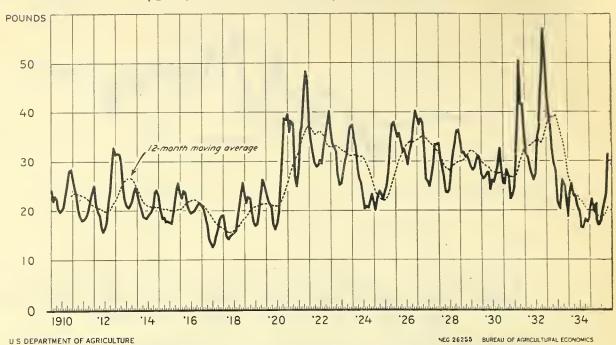
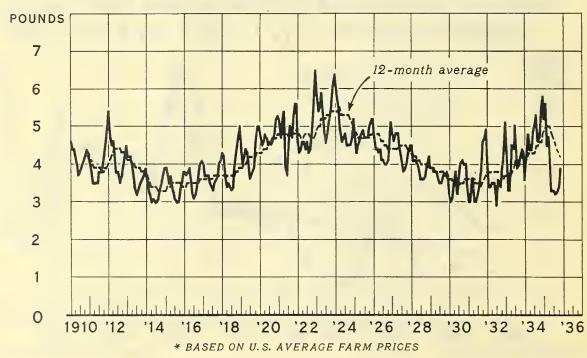


Figure 11.- During the 15-year period 1920 to 1934 the farm price of butterfat averaged 32 percent higher in relation to feed grains than in the pre-war period 1910-14. For over 2 years, from the middle of 1933 to the latter part of 1935, butterfat prices were unusually low in relation to feed grains. With the more normal crope in 1935 the relation of feed and butterfat prices in November 1935 was more nearly normal than in the earlier months of the year.

## POUNDS OF VEAL CALVES EQUIVALENT IN PRICE TO ONE POUND OF BUTTERFAT, 1910 TO DATE\*

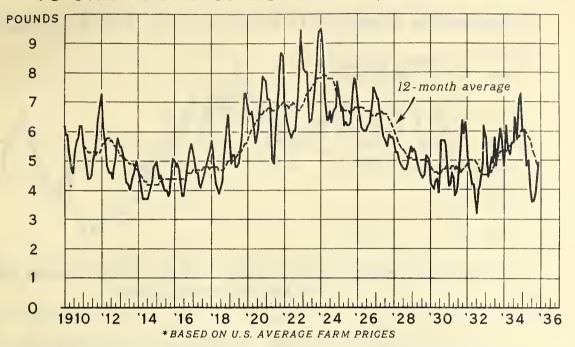


U.S. DEPARTMENT OF AGRICULTURE

NEG. 29426 BUREAU OF AGRICULTURAL ECONOMICS

Figure 12.- There is a long cycle in the relation of prices of veal calves and butterfat. Butterfat prices are high in relation to veal when cattle prices are low.

## POUNDS OF BEEF CATTLE EQUIVALENT IN PRICE TO ONE POUND OF BUTTERFAT, 1910 TO DATE\*



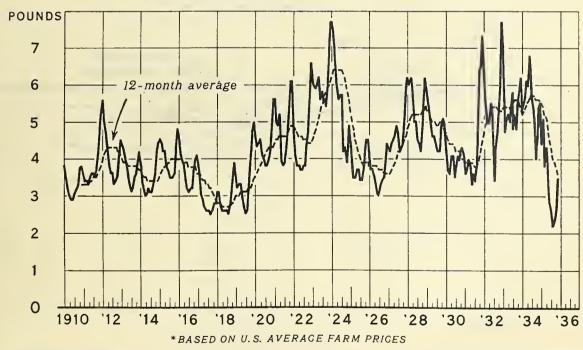
U. S. OEPARTMENT OF AGRICULTURE

EG. 2942B

BUREAU OF AGRICULTURAL ECONOMICS

Figure 13.- There is a long cycle in the relationship between prices of beef cattle and butterfat. (Butterfat prices are low in relation to beef cattle, when beef cattle prices are high.) During the last half of 1935 butterfat prices have been low in relation to beef cattle.

## POUNDS OF HOGS EQUIVALENT IN PRICE TO ONE POUND OF BUTTERFAT, 1910 TO DATE\*

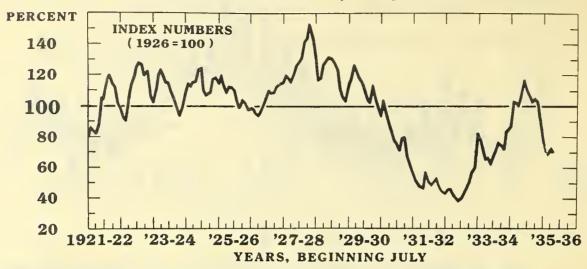


U. S. DEPARTMENT OF AGRICULTURE

NEG. 29427 BUREAU OF AGRICULTURAL ECONOMICS

Figure 14.- There is a cycle in the relationship between hoge and butterfat prices that is related to the hog cycle. During the 15-year period 1920 to 1934 butterfat prices averaged 30 percent higher in relation to hogs than in the period 1910 to 1914. In the last half of 1935 butterfat prices were the lowest in relation to hogs in over 25 years.

## Wholesale Feedstuff Prices, July 1921 to Date



U.S. DEPARTMENT OF AGRICULTURE

U.S. DEPARTMENT OF AGRICULTURE

NEG. 2 2 2 00-8 BUREAU OF AGRICULTURAL ECONOMICS

Figure 15 .- Wholeeale prices of by-product feed declined about 70 percent from the spring of 1928 to December 1932. The revaluation of the dollar and the low level of production because of the drought and reduced acreages resulted in a marked rise in prices from the latter part of 1932 up to the early part of 1935. With the more normal crope in 1935 prices of feed stuffs have

#### FLUID MILK: CONSUMPTION IN BOSTON, NEW YORK, AND PHILADELPHIA AND CONSUMPTION OF FLUID MILK AND CREAM IN CITIES AND VILLAGES, UNITED STATES, 1930 TO DATE

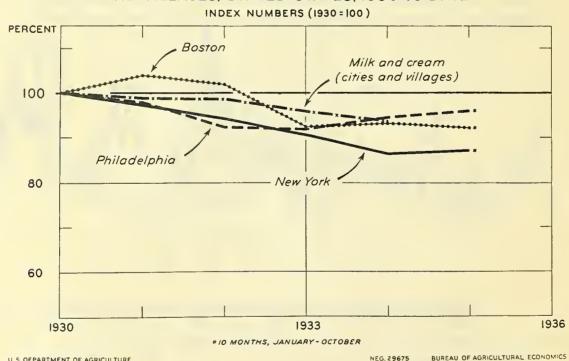


Figure 16 .- Consumption of fluid milk and cream in oities and villages declined 6 percent from 1930 to 1934. The three principal fluid milk markete also showed a decline in consumption of fluid milk from 1930 to 1934, although there was a considerable variation between markete. Consumption during the first 10 months of 1935, however, has been slightly higher than in the eame period of 1934.

### FLUID CREAM: CONSUMPTION IN BOSTON, NEW YORK, AND PHILADELPHIA, 1930 TO DATE

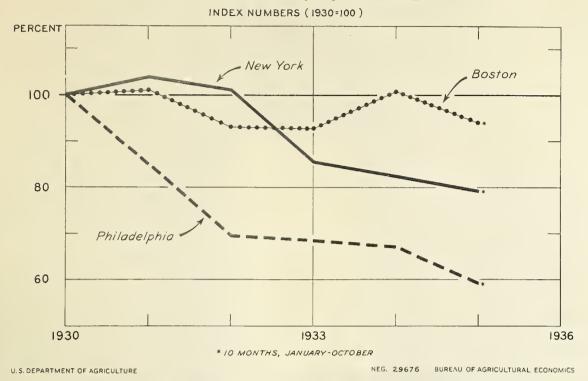


Figure 17.- Consumption of cream declined more than consumption of milk and the decline has continued in 1935.

#### CONSUMPTION OF DAIRY PRODUCTS, UNITED STATES, 1925 TO DATE

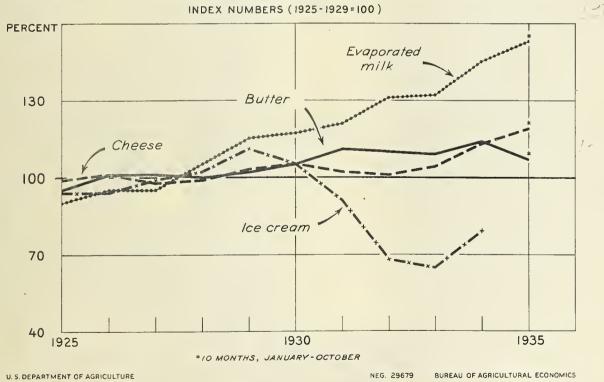
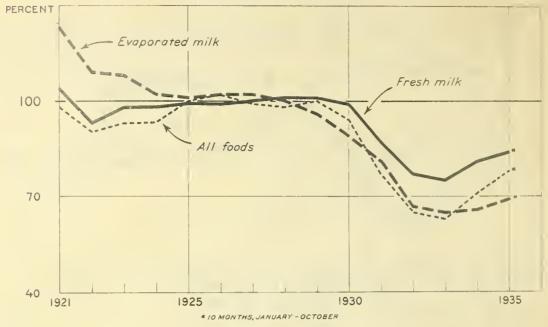


Figure 18.- During the prosperity period 1925 to 1929 the consumption of evaporated milk and ice cream increased, but during the depression 1930 to 1934 consumption of ice cream has declined sharply, while consumption of evaporated milk continued upward. Consumption of butter and cheese during the depression has been maintained above the 1925-1929 average.

#### RETAIL PRICES OF FRESH MILK, EVAPORATED MILK, AND All FOODS, UNITED STATES, 1921 TO DATE

INDEX NUMBERS (1925 - 1929 = 100 )



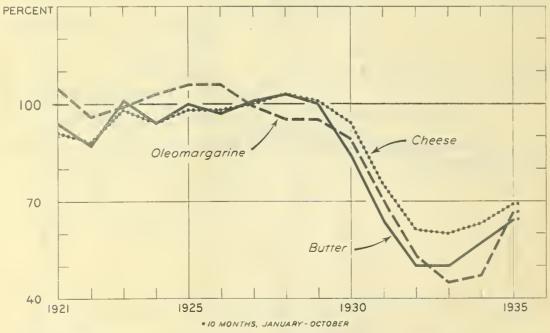
U. S. QEPARTMENT OF AGRICULTURE

NEG. 29677 BUREAU OF AGRICULTURAL ECONOMICS

Figure 19.- During the prosperity psriod 1925 to 1929 there was relatively little change in the relationship between the retail prices of fresh and evaporated milk and all foods. During the depression retail prices of "all foods" and evaporated milk declined more than fresh milk. Since 1933 milk prices and "all foods" have increased but evaporated milk is still relatively low.

#### RETAIL PRICES OF BUTTER, CHEESE, AND OLEMARGARINE, UNITED STATES, 1921 TO DATE

INDEX NUMBERS (1925-1929 = 100)



U S. DEPARTMENT OF AGRICULTURE

NEG. 29678

BUREAU OF AGRICULTURAL ECONOMICS

Figure 20.- From 1929 to 1932 butter prices declined more than oleomargarine prices. During the first 10 months of 1935, however, retail prices of butter and oleomargarine have been in about their pre-depression relationship. Cheese prices did not decline as much as butter from 1929 to 1932, nor have they increased as much since 1933.